

Work Order ID 142637

Friday, March 11, 2016 9:57:42 AM

142637

Page 1

Item ID: 646.3001 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Lower Cutter Assy
 Start Date: 3/16/2016 Start Qty: 4.00 ***4*** Cust Item ID:
 Required Date: 3/25/2016 Req'd Qty: 4.00 ***4*** Customer:
 Reference:

Approvals: Process Plan: MLS Date: MAR 11 2016 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
646.3000	N/C

110	Pick Kit	0.00							
110									
Packaging	Memo	0.00							
Packaging									

120		0.00							
120									
Small Fab	Memo	0.05							
Small Fab	Assemble as per dwg and apply loctite 598 on all faying surfaces shown on dwg per note 7.								
	A/R RTV LOCTITE 598: <u>134524</u>								
	exp. date: <u>17/09</u>								

DAS
8
9-89

4x 16/04/12 DAS 36 9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation		Disposition			
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
		OTHER : ☐			

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Page 2

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 Start Date: 3/16/2016 Start Qty: 4.00 ***4*** Cust Item ID:
 Required Date: 3/25/2016 Req'd Qty: 4.00 ***4*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC5- Inspect part completeness to step on W/O	0.00							
130									
QC	Memo	0.01							DAS 38 APR 12 2016
Quality Control									
140	Identify as per dwg & Stock Location: <u>CCK018</u>	0.00							
140									
Packaging	Memo	0.00							
Packaging	***IDENTIFY AS PER APICAL MPP-120 BY STAMPING THE P# AND REV***								4 MJS 16-04-14
150	QC21- Final Inspection - Work Order Release	0.00							
150									
QC	Memo	0.00							MJS APR 14 2016
Quality Control									

MJS APR 14 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval 	
Description Work Order Deviation		Disposition			
				Completed By 	
				Lead hand / Supervisor Approval Verification 	
				QC / QA Coordinator Approval 	

Root Cause	FAULT CATEGORY					
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabelled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐				
OTHER : ☐						

Picklist Print

Friday, March 11, 2016 9:57:41 AM

Page 1

Work Order ID: 142637

142637

Parent Item: 646.3001

646 3001

Parent Item Name: Lower Cutter Assy

Start Date: 3/16/2016

Required Date: 3/25/2016

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP REV:A 12.10.19 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MS21042L08		Purchased	No				Each	1,645.000		76			DAS 36 9-89
MS210421 08									**			16/04/06	
Nut													

Location	Loc Qty	Loc Code
CA	101	
m129682	101	
GA	161	
m133134	3	
m134063	158	
OVER007	500	
m134063	500	
ST303	483	
m133922	483	
ST308	400	
m134376	400	

646.3010 Manufactured No

646 3010

LH Half

646.3011

Manufactured No

646 3011

RH Half

110 Each 0.0000 1 4

B 136653 (4X) **

110 Each 9.0000 1 4

B 142330 **

Location	Loc Qty	Loc Code
cck102	9	
126778	3	
136653	6	

MAR 22 2016

DAS
6
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong				
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions				
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance				
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect				
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing				
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved				
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing				
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish				
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread				
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence				
Past Expiry Date ☐	☐ Manufacturing Process	OTHER : _____							
Misidentified ☐	☐ Past Due								

Picklist Print

Page 2

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Work Order ID: 142637

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Parent Item: 646.3001

646 3001

Parent Item Name: Lower Cutter Assy

Start Date: 3/16/2016

Required Date: 3/25/2016

Start Qty: 4.00

Required Qty: 4.00

646.3012 Manufactured No

110 Each 8.0000 1 4

646 3012

Lower Guide

Location

Loc Qty

Loc Code

CCK013

8

136147

8

110 Each 8.0000 1 4

646.3013 Manufactured No

646 3013

Blade

Location

Loc Qty

Loc Code

cck103

8

140566

8

110 Each 9.0000 1 4

646.3014 Manufactured No

646 3014

Blade

Location

Loc Qty

Loc Code

cck103

9

140561

9

110 Each 11.0000 1 4

646.3015 Manufactured No

646 3015

Blade

Location

Loc Qty

Loc Code

cck103

11

140185

11

110 Each 11.0000 1 4

DAS
6
8-89

DAS
6
8-89

DAS
6
8-89

DAS
6
8-89

MAR 22 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabelled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
		OTHER : ☐			

Picklist Print

Friday, March 11, 2016 9:57:41 AM

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Work Order ID: 142637

142637

Parent Item: 646.3001

646.3001

Parent Item Name: Lower Cutter Assy

Start Date: 3/16/2016

Required Date: 3/25/2016

Start Qty: 4.00

Required Qty: 4.00

MS27039-08-19

Purchased

No

110

Each

1,040.000

19

76

MS27039-08-19

Screw

16/04/06

DAS
36
9-89

Location

Loc Qty

Loc Code

CCK06

200

m134142

200

GA

677

m132930

84

m133077

22

m134063

571

over006

100

m134294

100

ST277

63

m133769

63

76

NAS1149FN832P

Purchased

No

110

Each

3,671.000

38

152

NAS1149FN832P

Washer

16/04/06

DAS
36
1-89

Location

Loc Qty

Loc Code

GA

1361

M133316

16

M133769

1345

ST260a

1200

M134257

1200

ST262

1110

M133709

1110

152

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

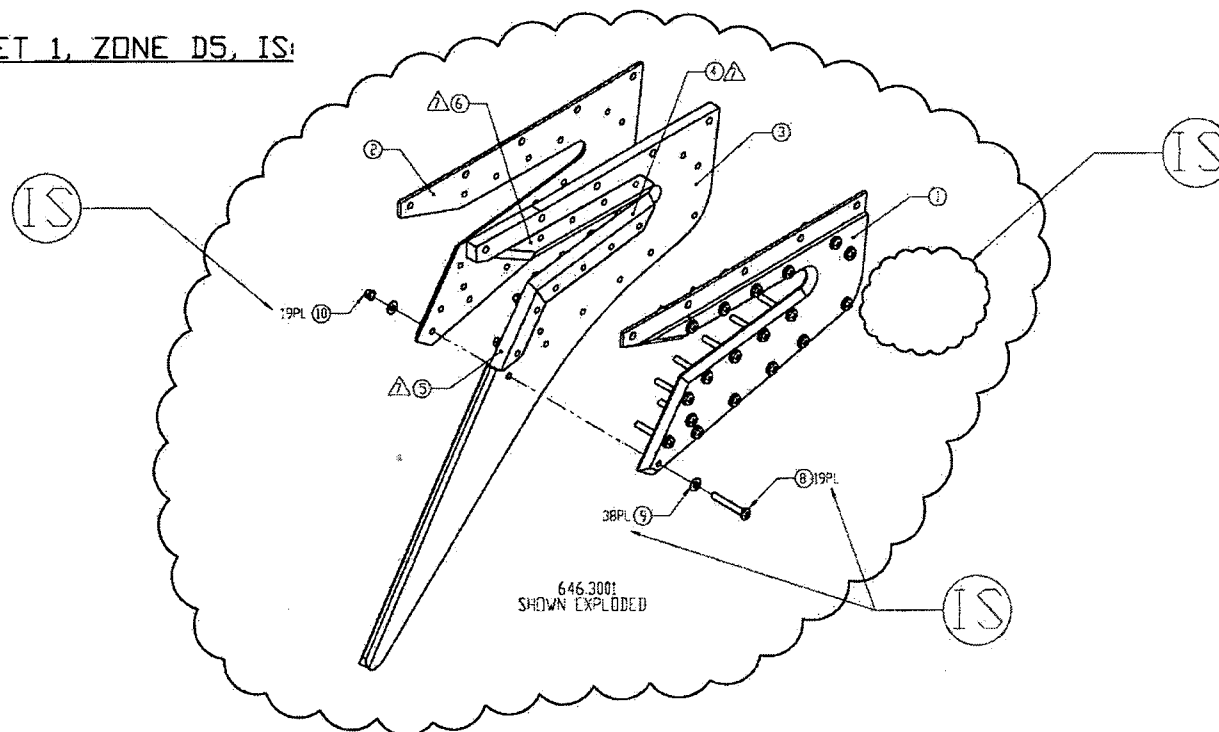
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabelled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

APICAL
INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO. 02195		SHEET 1 OF 4	
DWG NO. 646.3000	REV: N/C	PREPARED BY S. HUFF	DATE: 01/05/09
DWG TITLE: LOWER CUTTER ASSY		EFFECT ON DWG ☐ INC. ☒ UNINC.	
APPROVED BY: ENGR <i>[Signature]</i>	MFG <i>[Signature]</i>	QC <i>[Signature]</i>	EFF: NEXT ORDER
REASON: REMOVED RIVETS IN FAVOR OF ADDITIONAL SCREWS			
TRANSACTION CODES (TC): A-ADD C-CREATE R-REVISE D-DELETE			

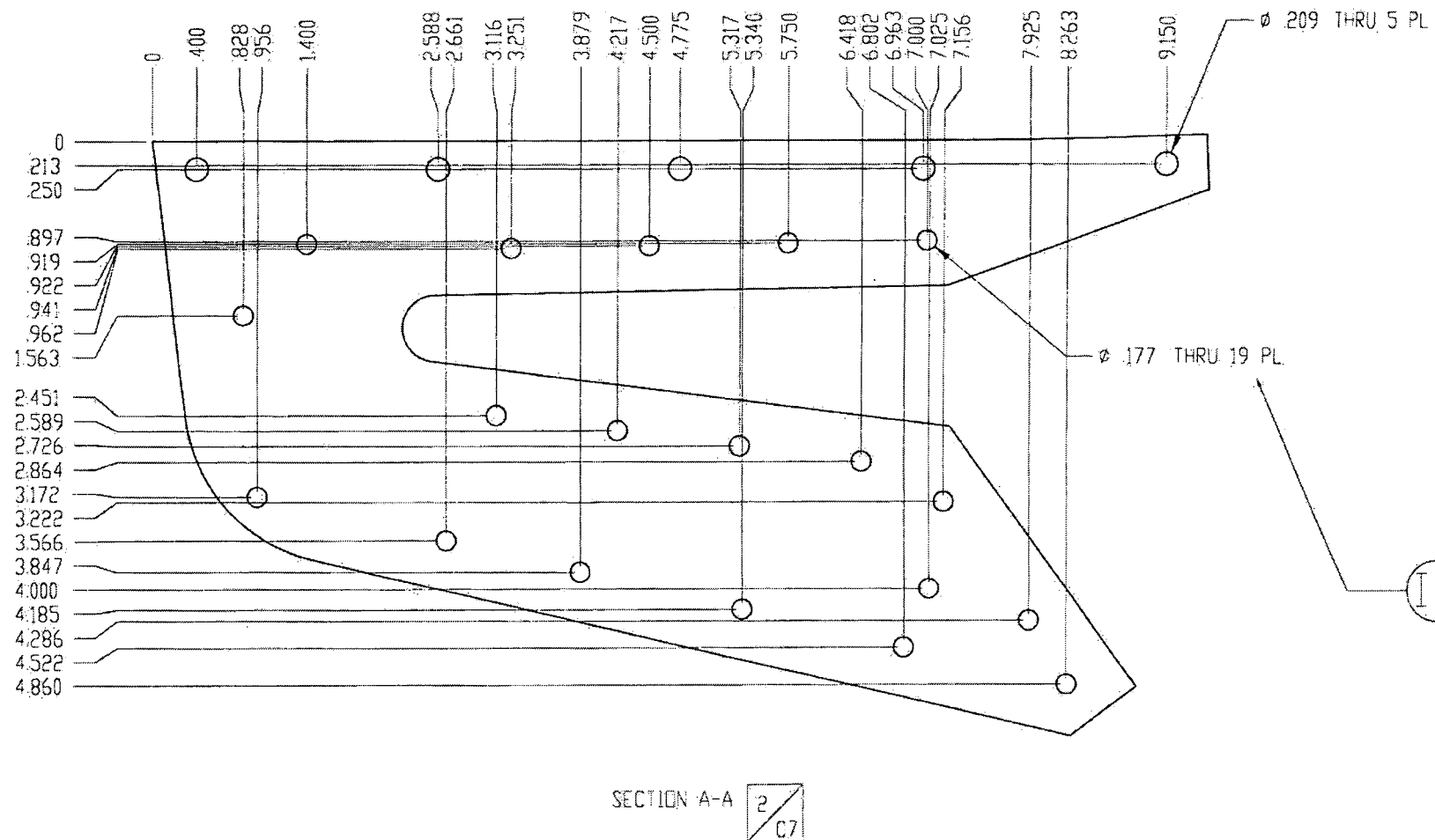
SHEET 1, ZONE D5, IS:



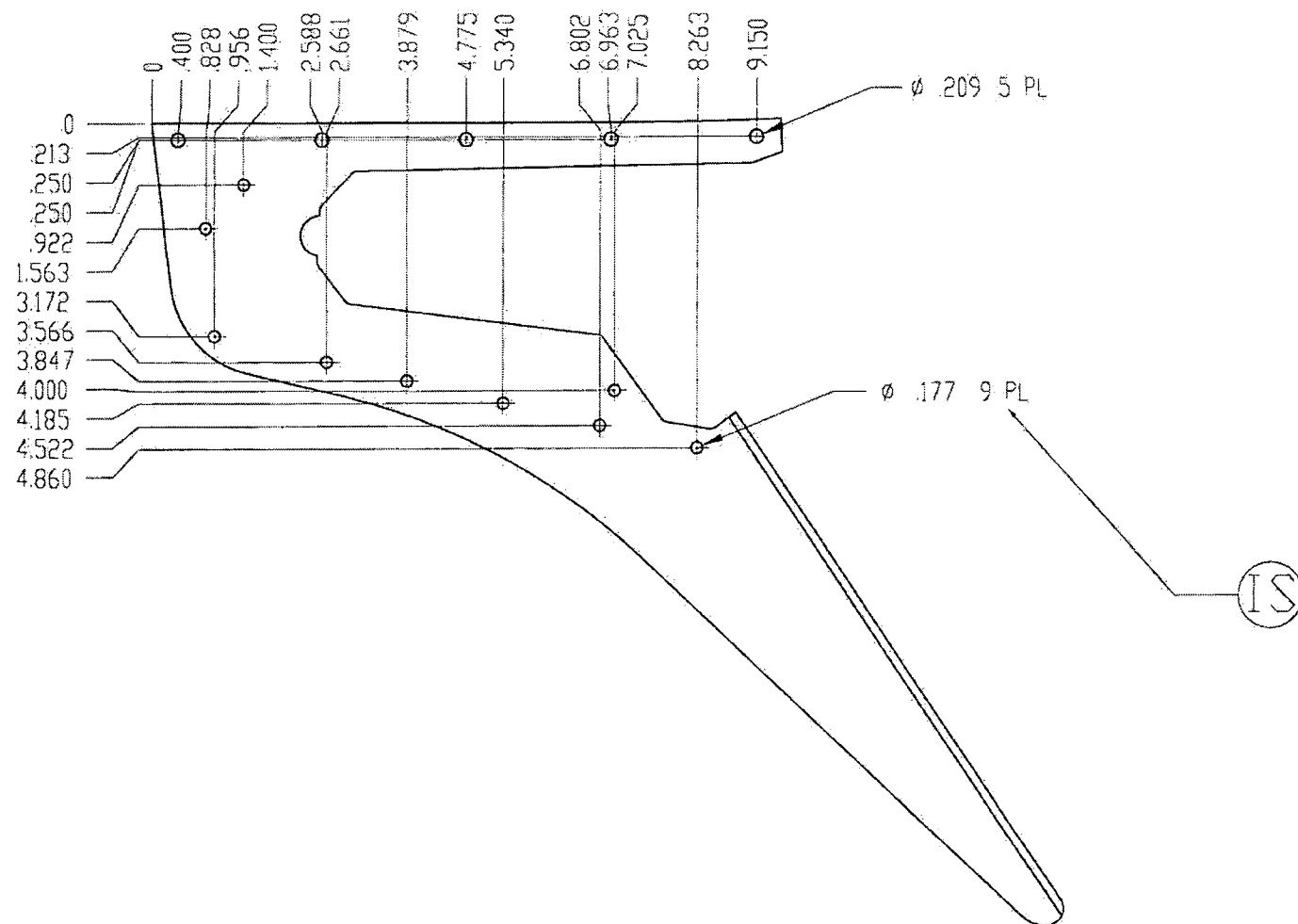
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 142637 ML5
16-03-11

10	R	601.1541	19	LOCKNUT	MS21042L08
9	R	601.2764	38	WASHER	NAS1149FN832P
8	R	601.2765	19	SCREW	MS27039-0819
7	D	601.2766	2	RIVET	MS20470AD5-18
			3001		
F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL/SPECIFICATION
DOCUMENTS EFFECTED: ☐ MDL ☒ INSTALL INSTRU ☒ ICA ☐ FMS ☒ BOM					CHANGE CATEGORY ☐ MAJOR ☒ MINOR
					DER REVIEW REQUIRED ☐ YES ☒ NO

SHEET 3 IS:



F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL/SPECIFICATION

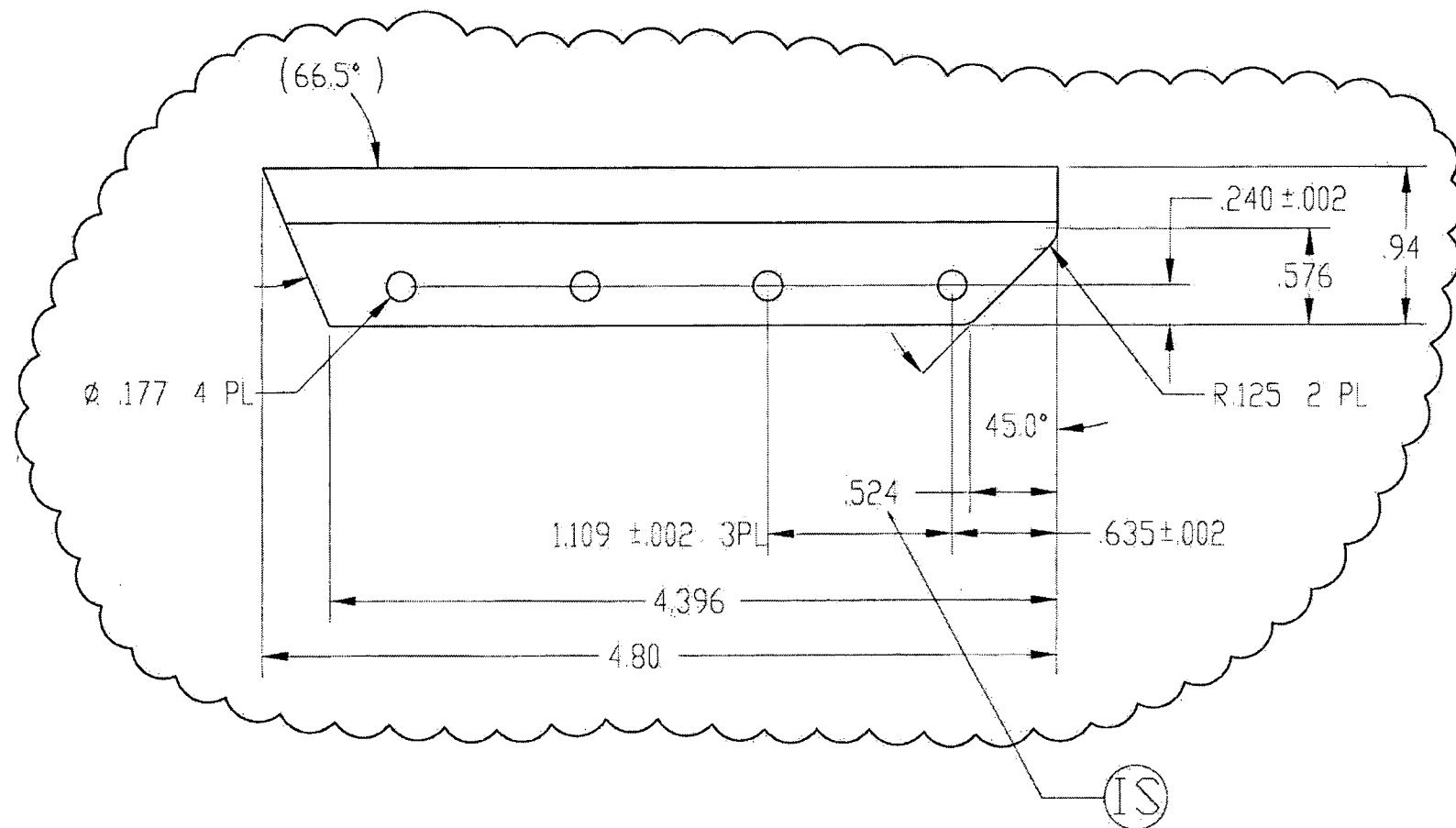
SHEET 5 IS:

SECTION F-F



F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL/SPECIFICATION

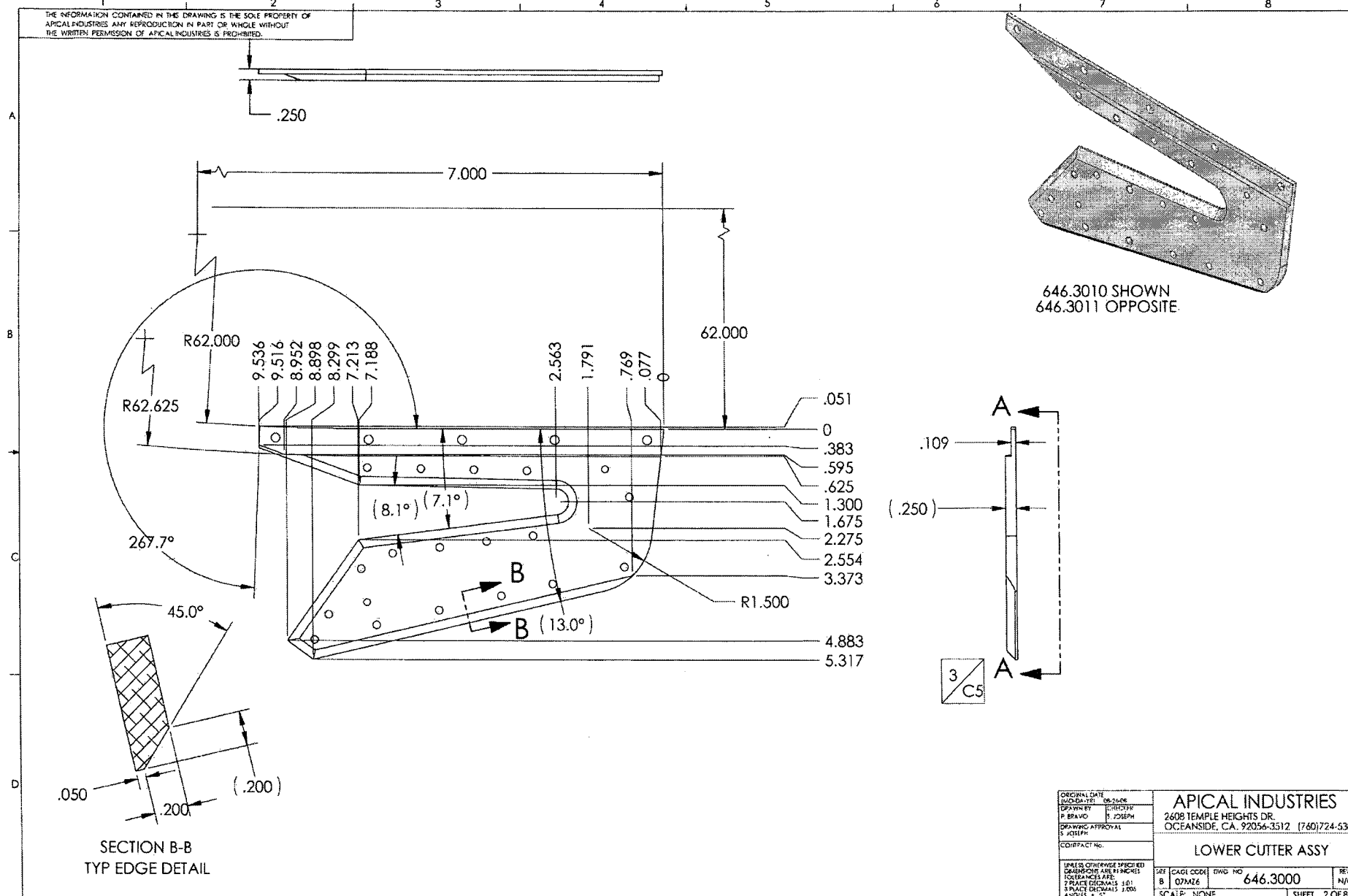
(66.5°)



F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL/SPECIFICATION

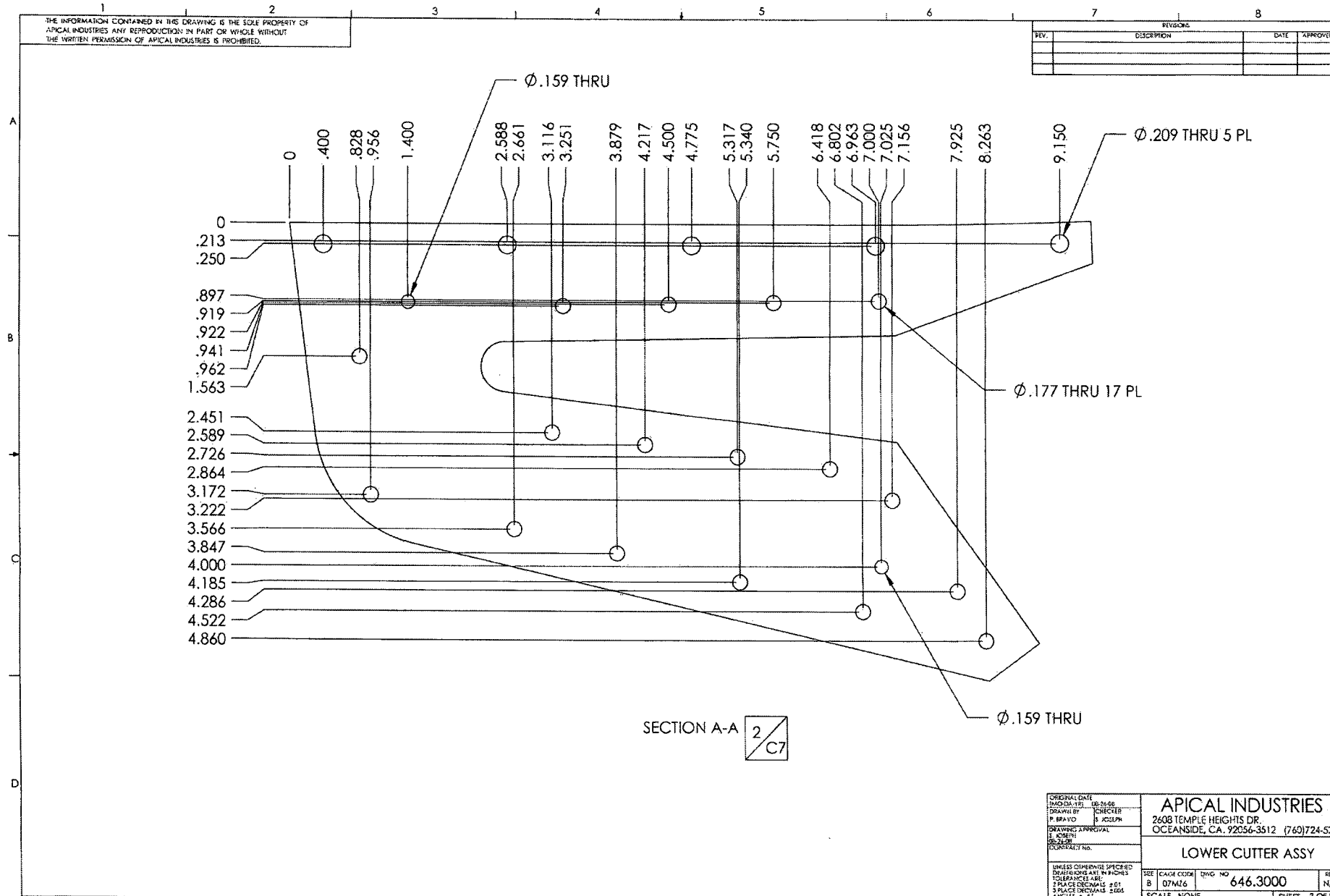
	A7F	11	601.2045	RIV.	LOCITE 598				
17	10		601.1868	LOCKNUT		MAGTOS-08			
34	9		601.2764	WASHER		HEA5114FFHNSP			
17	8		601.2765	SCREW		MAGTORQ 0014			
2	7		601.2766	RIVET		MAGTEGRTDMS-RE			
1	6		646.3015	BLADE		△		△	
1	5		646.3014	BLADE		△		△	
1	4		646.3013	BLADE		△		△	
1	3		646.3012	LOWER GUIDE		△		△	
1	2		646.3011	RH HALF		△		△	
1	1		646.3010	LH HALF		△		△	
X				LOWER CUTTER ASSY					
XXX	FIND #	PART #	DESCRIPTION	MATL	SPEC.				
QTY				PARTS LIST					
NEXT ASSY [S]				APICAL INDUSTRIES					
646.4000				2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300					
				LOWER CUTTER ASSY					
				B		SCALE NONE		REV N/C	
				CAGE CODE		DWG NO		REV	
				07/MZ6		646.3000		N/C	
				SCALE NONE		1 SHEET		OF	

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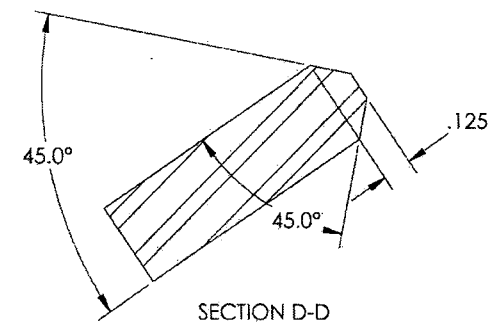
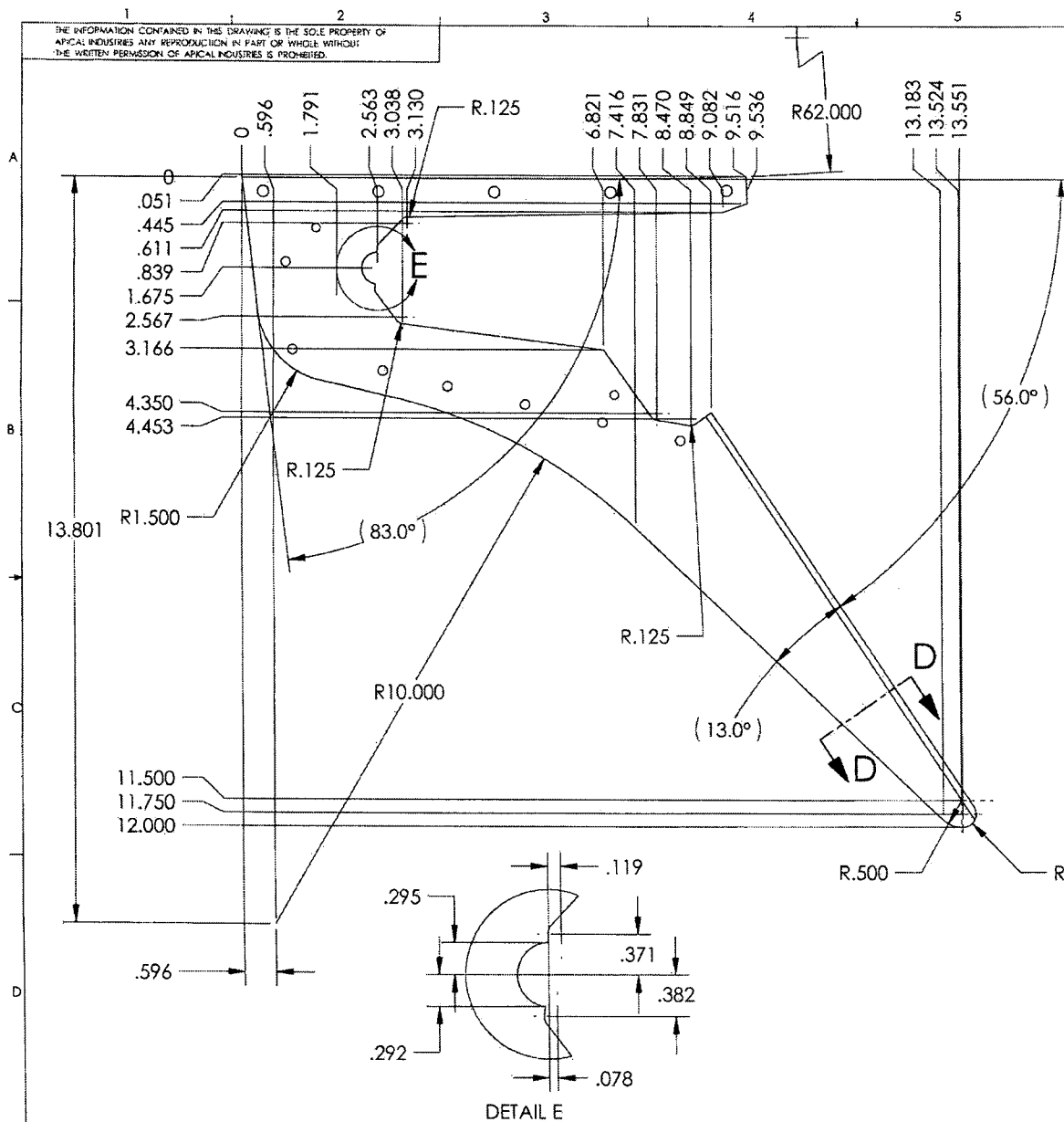
REV.	DESCRIPTION	DATE	APPROVED



ORIGINAL DATE 10/24/08		APICAL INDUSTRIES	
DRAWN BY P. BRAVO		2608 TEMPLE HEIGHTS DR.	
CHECKED BY S. JOSEPH		OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL S. JOSEPH		LOWER CUTTER ASSY	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACES DECIMALS .005 ANGLES $\pm 1^\circ$		SEE CAUSE CODE B 07M16	REV. N/C
DWG NO. 646.3000		SHEET 3 OF 8	

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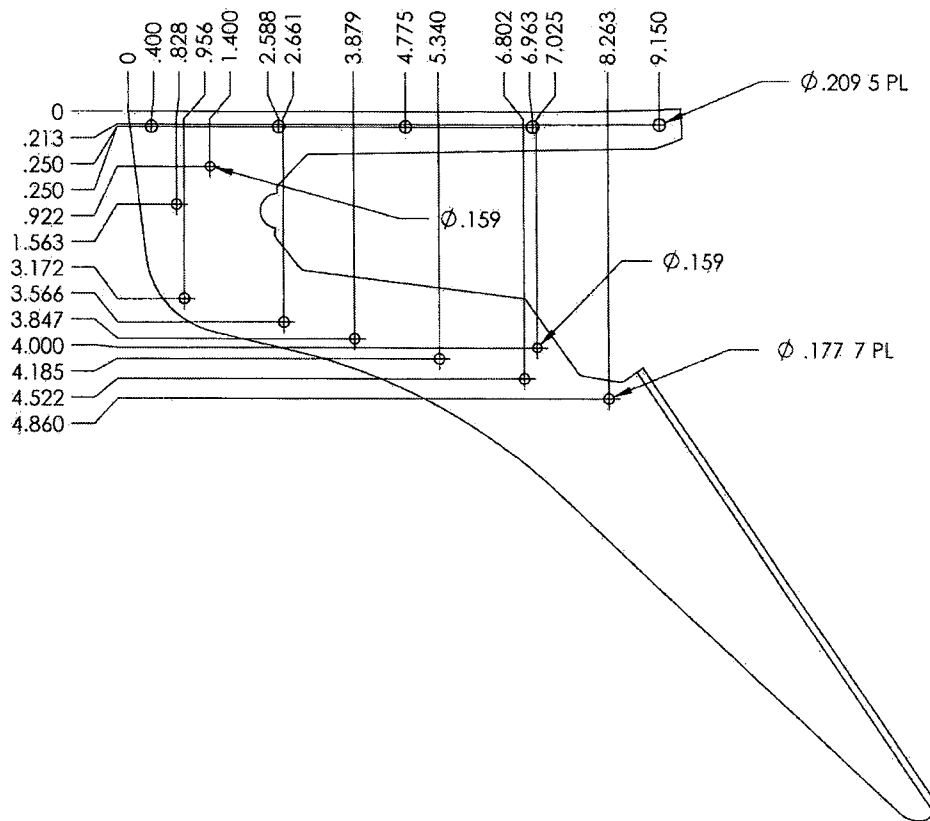
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



ORIGINAL DATE 11-03-81		BY 24-85	
DRAWN BY P. BRAVO		CHECKED S. JOSEPH	
DRAWING APPROVAL S. JOSEPH		CONTRACT NO.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ±.01 ANGLES ±.5°		SHEET B	4 OF 8
APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300		DWG. NO. 646.3000	REV. N/C
LOWER CUTTER ASSY		SCALE NONE	

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

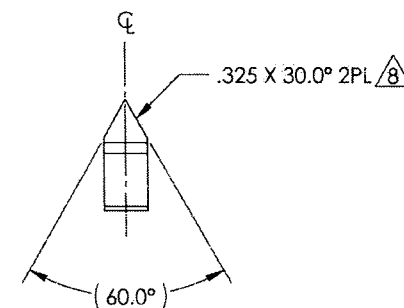
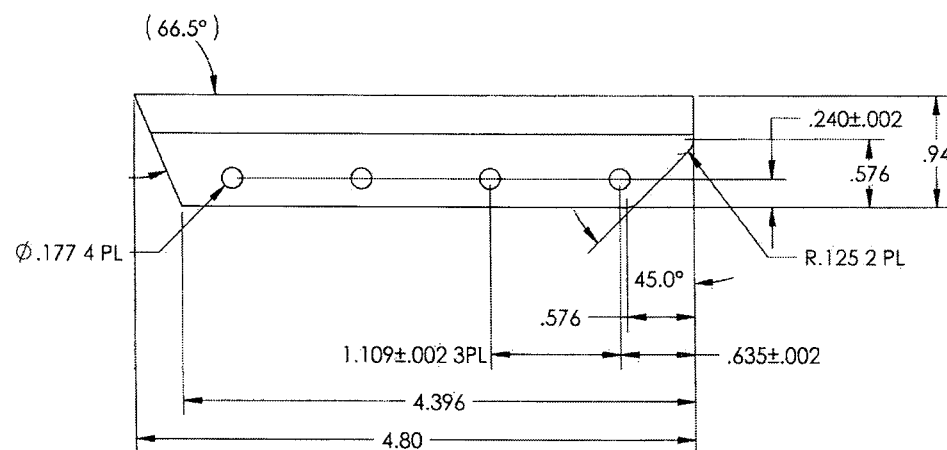
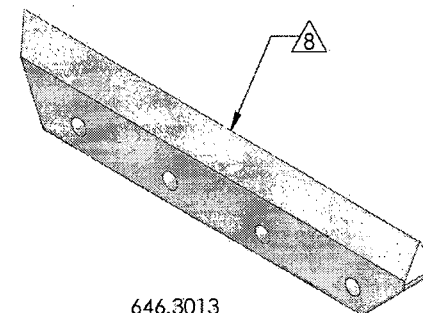
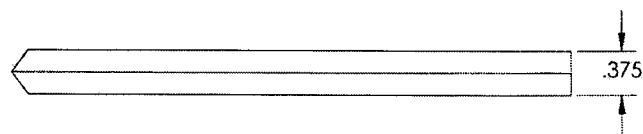


SECTION F-F 4/B6

ORIGINAL DATE 1/20/01 DESIGNED BY P. BRAVO DRAWING APPROVAL J. JOSEPH CONTRACT NO.		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ± .01 3 PLACE DECIMALS ± .005 ANGLES ± .5°		LOWER CUTTER ASSY	
SIZE B	CAGE CODE 07MA26	DWG. NO. 646.3000	REV. N/C
SCALE NONE		SHEET 5 OF 8	

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REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

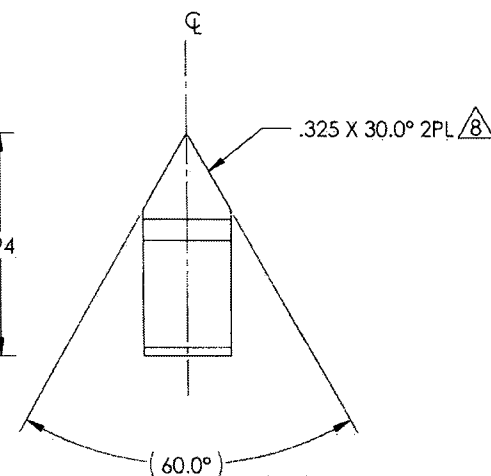
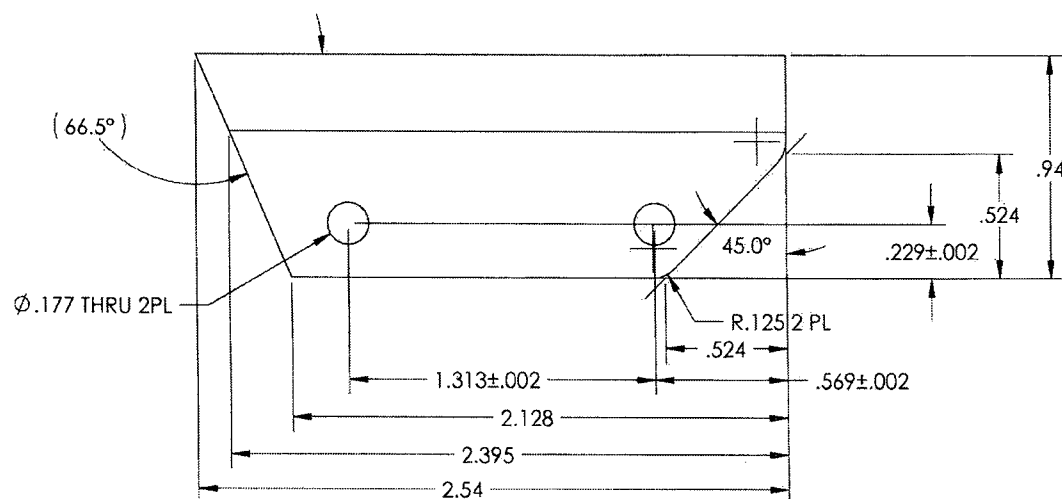
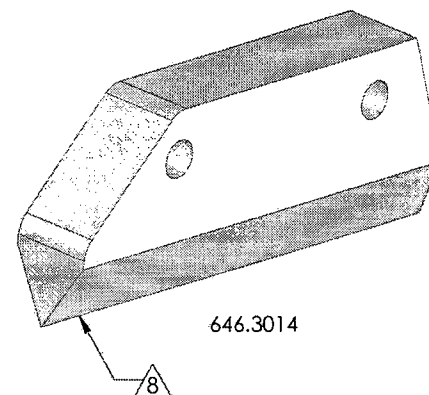
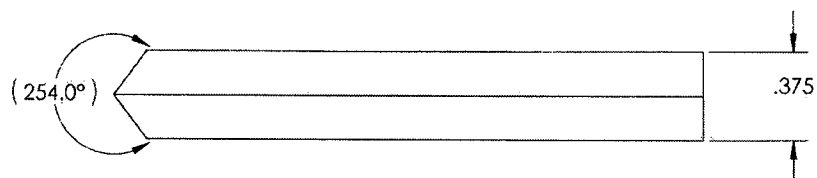


ORIGINAL DATE APICAL-PL 05-29-68		APICAL INDUSTRIES	
DRAWN BY F. BRAVO		2608 TEMPLE HEIGHTS DR.	
CHECKED BY S. JOSEPH		OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL S. JOSEPH		LOWER CUTTER ASSY	
CONTRACT NO.		646.3000	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS $\pm$.01 3 PLACE DECIMALS $\pm$.005 ANGLES $\pm$ 3°		SCALE NONE	REV N/C

SHEET 6 OF 8

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REVISION			
REV	DESCRIPTION	DATE	APPROVED



ORIGINAL DATE
DESIGNED BY
DRAWN BY
CHECKED BY
P. PAVO
S. JOSEPH
DRAWING APPROVAL
S. JOSEPH
CONTRACTING

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
1. ALL DIMENSIONS ± 0.01
2. ALL DECIMALS ± 0.01
3. ALL ANGLES ± 5°

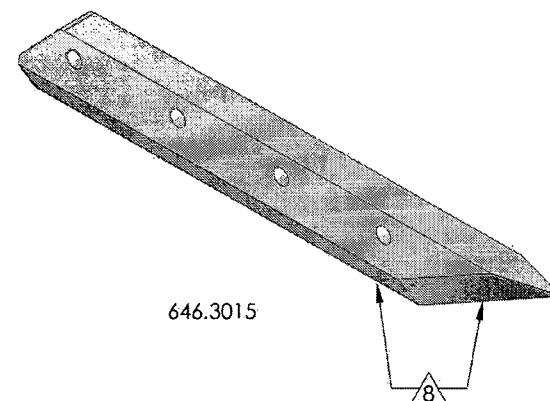
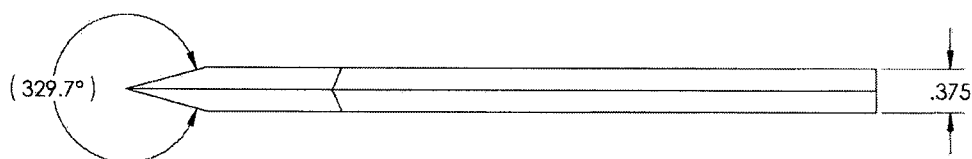
APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760) 724-5300

LOWER CUTTER ASSY

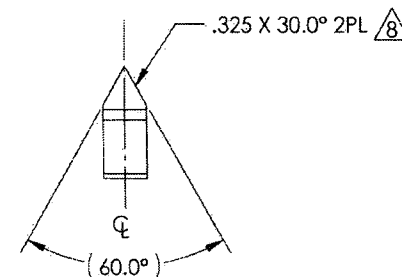
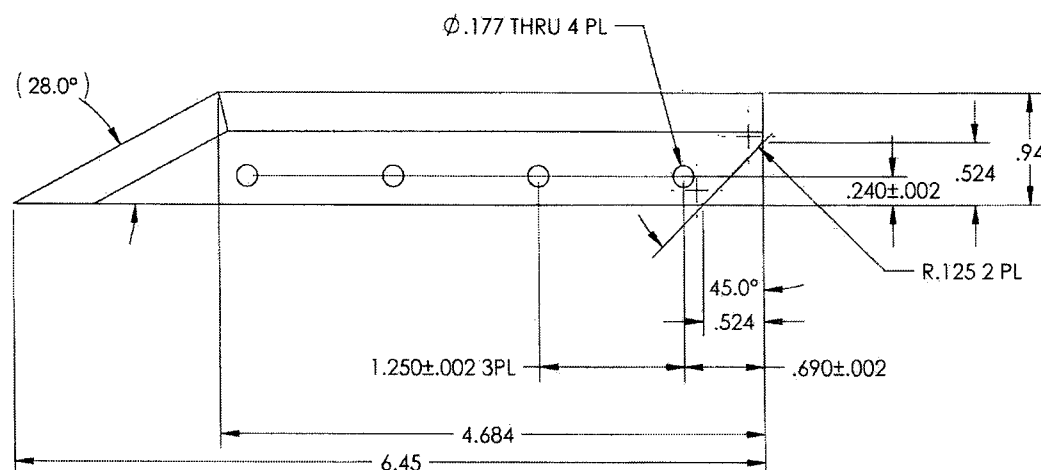
SCALE: NONE SHEET: 7 OF 8

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



646.3015



ORIGINAL DATE: 09-23-08
 DRAWN BY: P. BRAVO
 CHECKED BY: S. JOSEPH
 DRAWING APPROVAL: S. JOSEPH
 CONTRACT NO.

APICAL INDUSTRIES
 2608 TEMPLE HEIGHTS DR.
 OCEANSIDE, CA. 92056-3512 (760)724-5300

LOWER CUTTER ASSY

UNLESS OTHERWISE SPECIFIED
 DIMENSIONS ARE IN INCHES
 TOLERANCES ARE:
 FRACTIONS DECIMALS ±.01
 3 PLACES DECIMALS ±.005
 ANGLES ± .5°

REV.	CAGE CODE	DWG. NO.	REV.
B	07M16	646.3000	N/C
SCALE: NONE			SHEET 8 OF 8